**Data 4 Health**

Using data to understand & improve the health status of municipalities

Problem Statement and challenge for Everest Hack 2019



## Sustainable Development Goals (SDG)

**“We envision Nepal as an enterprise-friendly middle-income country by 2030, peopled by a vibrant and youthful middle-class living in a healthy environment, with absolute poverty in the low single digits.”** – Nepal SDGs, Status and Roadmap (2016-2030), National Planning Commission

**Health in SDGs:**



**Goal 3:**

Ensure healthy lives and promote well-being for all at all ages.

**Some indicators:**

|  |  |
| --- | --- |
| **Indicator** | **National Target by 2030** |
| Birth attended by skilled health personnel (%) | 90 |
| Under five mortality rate (per thousand) | 20 |
| Vaccination coverage (%) | 95 |
| Maternal Mortality Ratio (Per 100,000 Live Births) | 70 |

## Routine Health Data

Government of Nepal, Ministry of Health and Population has a separate body – Integrated Health Information Management Section(IHIMS) under Department of Health Services, to manage health service related information from every health institution. The section runs a robust and well defined Health Management Information System (HMIS) that provides routine health service data for planning, monitoring and evaluation of Health system at all levels. The major functions of the HMIS are:

* To collect and manage the health service delivery information for all level of health service delivery outlets including services at the communities by FCHVs and community level health workers.
* To verify, process, analyze the collected data and operate data bank.
* To provide feedbacks on achievements, coverage, continuity and quality of health services to the concerned authorities
* To draw indicators and relevant information and support to the programme management
* To disseminate health information through efficient methods and technologies
* To publish a comprehensive Annual Report of Department of Health Services
* To develop competent human resource for Health Information Management System

HMIS system focuses on collection, validation, analysis and presentation of aggregate health service delivery data on monthly basis.

**Some indicators from HMIS (3 municipalities):**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Organisation unit | 51106 Nepalganj Sub-Metropolitan City | | 30703 Madhyapur Thimi Municipality | | 70803 Godawari Municipality | |
| Data / Period | Shrawan 2073 to Asar 2074 | Shrawan 2074 to Asar 2075 | Shrawan 2073 to Asar 2074 | Shrawan 2074 to Asar 2075 | Shrawan 2073 to Asar 2074 | Shrawan 2074 to Asar 2075 |
| Percentage of children aged 9-11 months immunized with measles/rubella 1 | 79.4 | 87.3 | 87.5 | 94.7 | 88.1 | 84.5 |
| Percentage of children aged 12-23 months immunized with measles/rubella 2 | 55.4 | 91 | 62.1 | 73.8 | 52 | 52.4 |
| Percentage of children aged 0-11 months registered for growth monitoring | 50 | 58 | 81.2 | 104.8 | 77 | 71.5 |
| Percentage of children aged 0-23 months registered for growth monitoring | 33.6 | 42.7 | 78.4 | 101.5 | 46.9 | 45.3 |
| Percentage of children aged 12-23 months registered for growth monitoring | 17.8 | 25.8 | 75.8 | 98.5 | 16.9 | 22.7 |
| % of children aged 0-23 months registered for Growth Monitoring (New) who were Underweight | 6.6 | 4.8 | 3.7 | 0.8 | 3.3 | 5.5 |
| Percentage of institutional deliveries | 232.6 | 245.6 | 8.1 | 11.1 | 35 | 33.5 |
| Percentage of pregnant women who had four ANC checkups as per protocol (4th, 6th, 8th and 9th month) | 43.6 | 59.7 | 18 | 24.2 | 64.7 | 54.1 |
| Percentage of women who had four ANC check-ups as per protocol (4th, 6th, 8th and 9th months) and delivered in a health facility) | 43.6 | 59.7 | 18 | 24.2 | 64.7 | 54.1 |
| Percentage of women who had 3 PNC check-ups as per protocol (1st within 24 hours, 2nd within 72 hours and 3rd within 7 days of delivery) | 4.3 | 3.9 | 4.5 | 13.1 | 21.9 | 18.4 |

## The service availability and readiness survey

To measure the service availability and readiness of the public and private facilities, a comprehensive survey in 3 selected municipalities (Madhyapur Thimi - Bhaktapur, Nepalgunj - Banke and Godawari - Kailali) was conducted. The objectives of the survey were to:

* Assess the availability of basic services in health facilities
* Assess the preparedness of health facilities to provide quality services
* Provide baseline assessment for tracking future progress
* Identify gaps in support services and process used to provide health service that may limit the ability of facilities to provide quality service
* Provide a comprehensive body of information on the performance of different types of health facilities
* To map the existing public and private health institutions, in three municipalities

The following focus area were covered in the survey:

* Budget
* Human resources
* Service delivery
* Information management
* Governance
* Logistics supply & Infrastructure

The survey was designed to collect the data on six priority areas as follows:

1. Service Delivery
   1. Service Availability
      1. Source of water
      2. Power supply
      3. Basic supplies and equipment
      4. Client Waiting area and examination room
      5. General facility level cleanliness
      6. Waste Management
   2. Service Readiness (ready to provide basic services)
      1. Immunization
      2. Growth monitoring
      3. Child curative care services
      4. Family planning
      5. Antenatal care
      6. Delivery and newborn care
2. Health Workforce
   1. Staffing
   2. Absenteeism
3. Health Information System
   1. HMIS
   2. Health Statistics
4. Access to essential Medicine
5. Finance – Income of the facility
6. Leadership/Governance
   1. Management Meetings
   2. Supervision

The data was collected from 505 private and public health facilities in the selected municipalities.

## The problems

### Nepal has SDG targets to achieve, which is very challenging based on the status.

**“Nepal will struggle to achieve SDGs and universal health coverage without ensuring quality health care, experts say”** – The Kathmandu Post – June 08 2019

**“Nepal needs to invest more to achieve the SDG targets by 2030”** - UNDP Nepal – September 25 2018

### Indicators of good health are on a declining trend in Nepal

### Decision makers are not very aware of the evidence required for decision making

## Possible solutions

Based on the routine health data and the gaps identified from the survey data, an integrated digital solution for local level governments to visualize the status of the indicators and to support to prepare need based policy and plan to meet the SDG targets. The teams should aim to work on solutions that will:

* Help decision makers understand the situation
* Support decision makers in moving from anecdotal evidence to REAL evidence
* Improve transparency and accountability mechanisms of government(s).